High-Speed Rail Evaluation

October 12, 2007

Planning Committee

High-Speed Rail Questions

1. Should the Bay Area support building a statewide high-speed rail system?

2. Which Bay Area high-speed rail alignment is preferred and why?

3. How can High-Speed Rail be phased in Northern California and the Bay Area?

Q1: Should the Bay Area support building a statewide high-speed rail system?

YES

- Development of high-speed rail service could divert an estimated 32 million daily vehicle miles traveled statewide passenger trips thereby reducing freeway congestion and improving air quality
- HSR service could save an estimated 22 million barrels of oil and 18 tons of CO_2 annually by 2030 since trains are inherently more efficient than airplanes and autos
- The Bay Area can “piggy back” on high speed rail investments to accelerate development of the regional rail network in the Peninsula, East Bay, Tri Valley & Dumbarton corridors
- HSR stations can promote higher densities and more utilization of mass transit in existing urbanized areas in the Bay Area and Central Valley

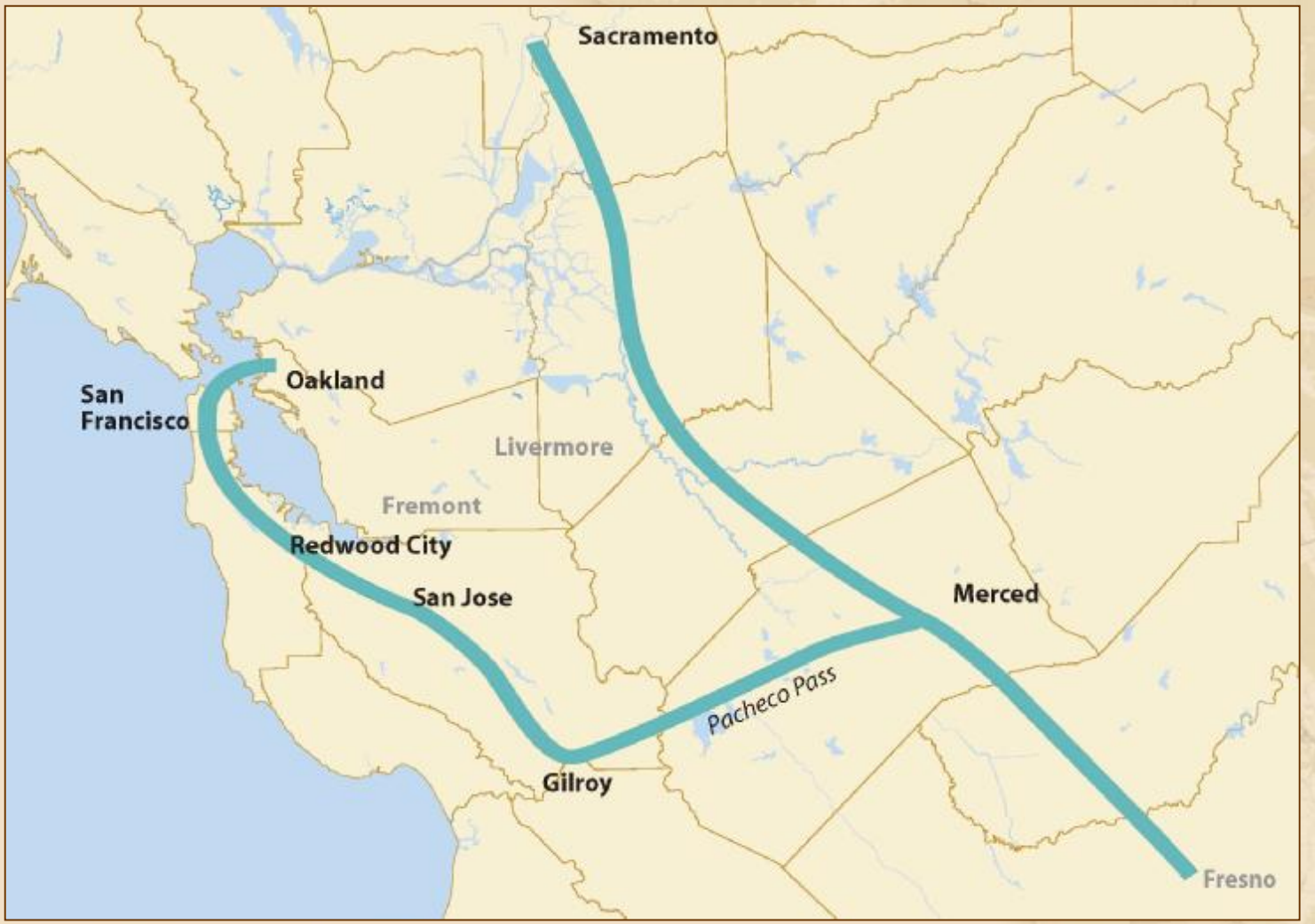
Q2: Which Bay Area high-speed rail alignment is preferred and why?

Both – Each Alternative Provides Different but Important Benefits

- The Pacheco route provides a superior high-speed statewide service to Fresno and points south including Southern California – more trips would be made between Northern California points and Southern California with a Pacheco Pass alignment
- The Altamont route better serves regional travel and provides better connections between the Bay Area and the Northern San Joaquin Valley – more trips between destinations located north of Fresno would be made on the high-speed network with an Altamont Pass alignment
- In the long term, a system with both links would serve the highest number of trips to Northern California destinations

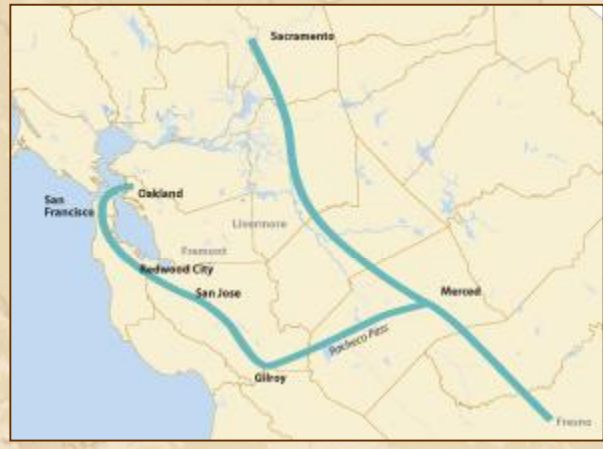
1999 Pacheco Option

Preferred Regional Rail Plan
Pacheco Option

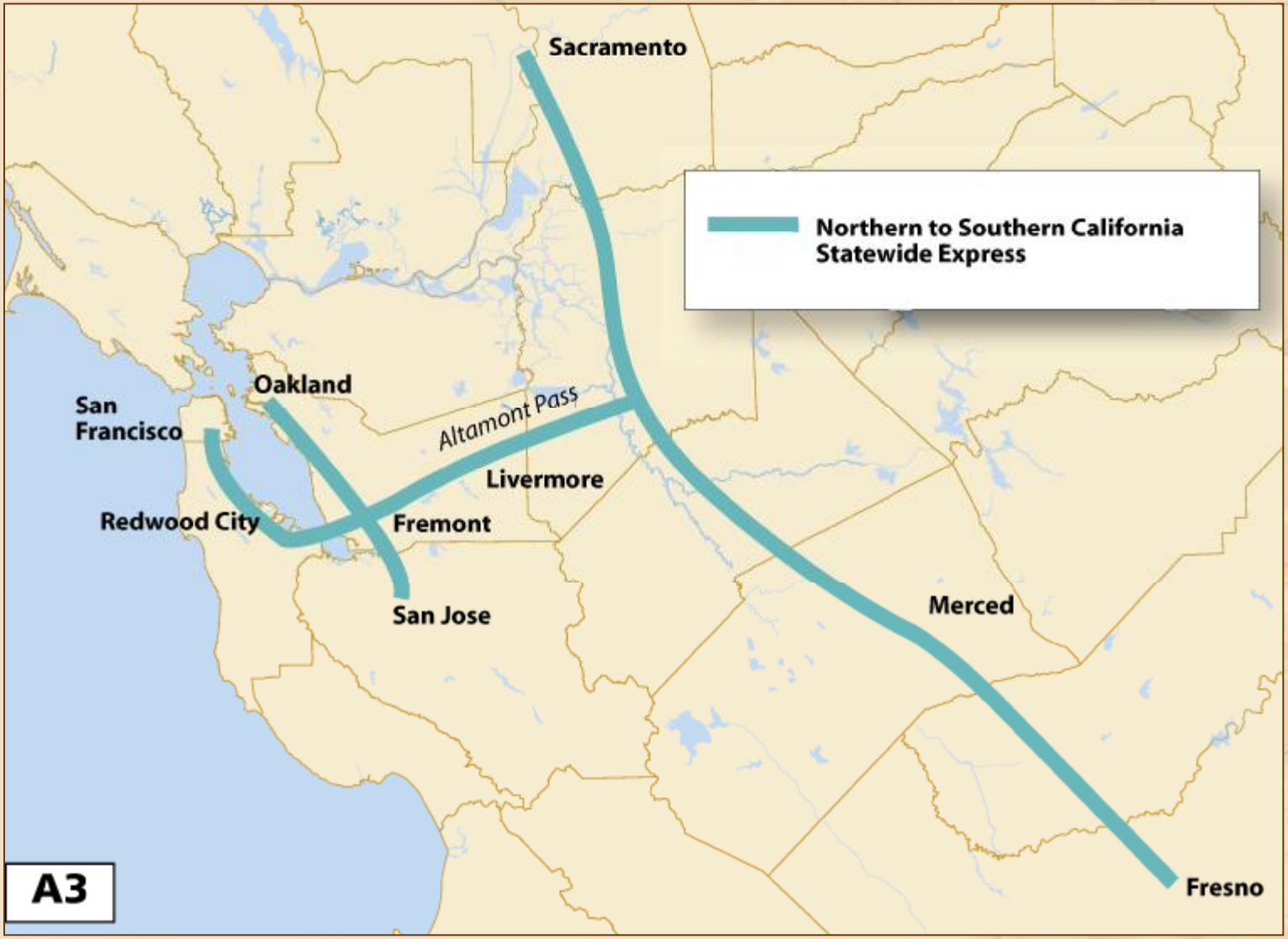


Why New Preferred Pacheco Alignment?

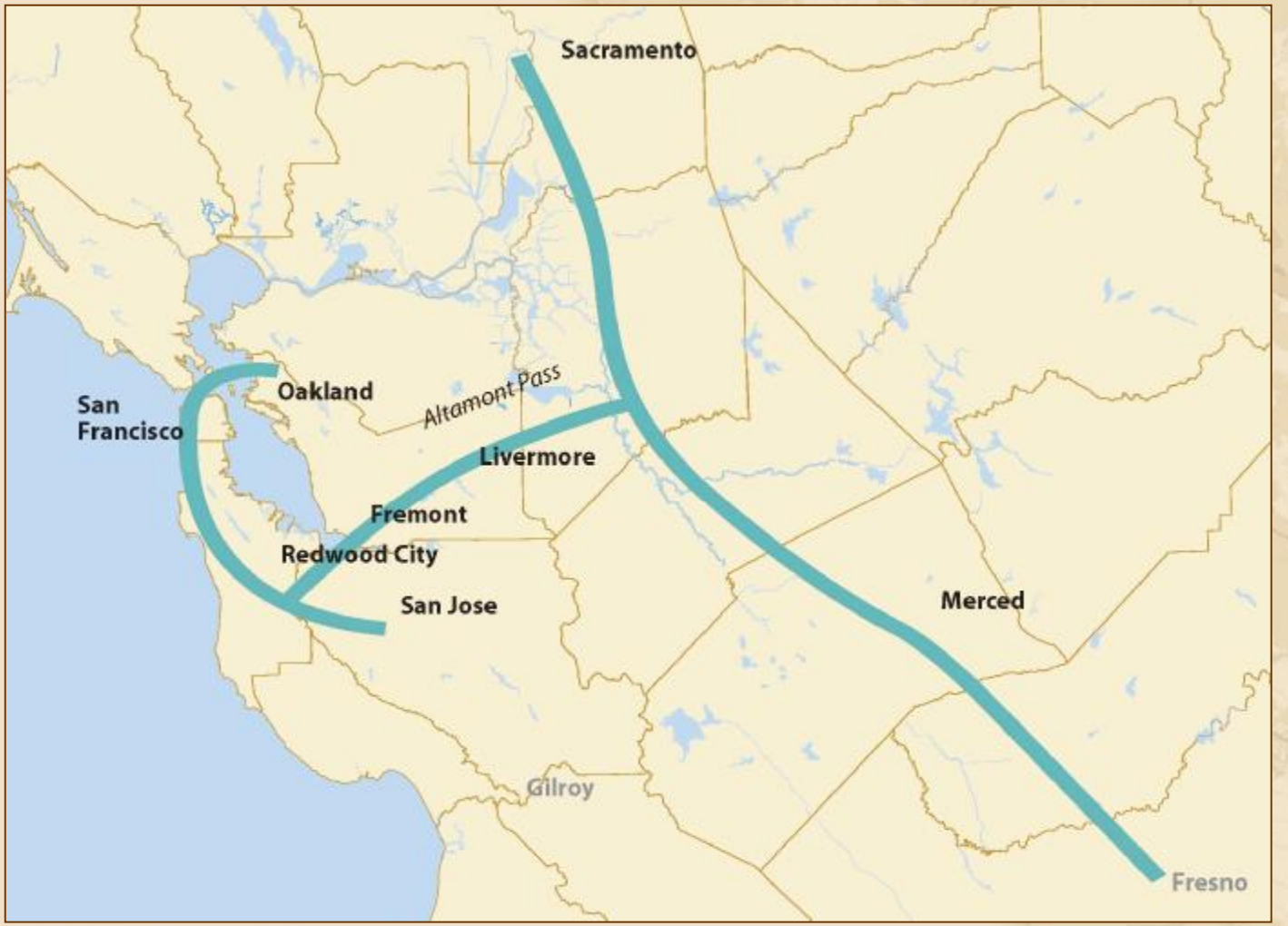
- Cost –
  $2 billion less
- Ridership –
  10% higher
- Other Issues:
  - All trains go through three largest cities
  - Avoids UPRR ROW agreement in East Bay
  - Avoids ROW needs in I-880 corridor in South Bay
  - Avoids Capitol Corridor and BART service duplication



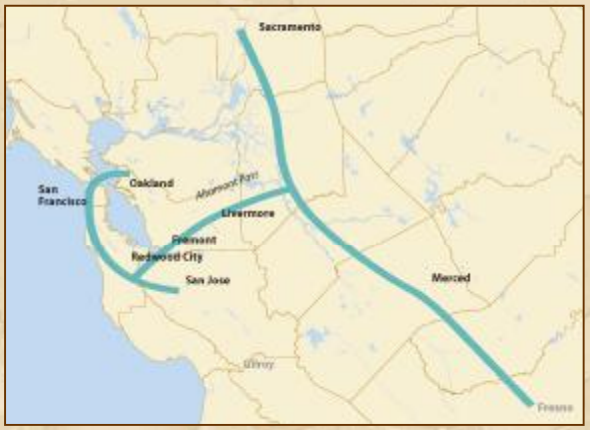
1999 Altamont Option



Preferred Regional Rail Plan
Altamont Option



Why New Preferred Altamont Alignment?



- Cost– Same
- Ridership – 13%-14% higher
- Other Issues:
  - Avoids service splits to three cities
  - Reduces UPRR ROW negotiations
  - Avoids duplication of service with Capitol Corridor and BART service
  - Avoids ROW needs in I-880 corridor in South Bay

Pacheco + Altamont Option


High-Speed Rail
Travel Markets
Sacramento
San
Francisco
Oakland
Livermore
Manteca
San Jose
Merced
Gilroy
Fresno
Bakersfield
Palmdale
Los Angeles
Riverside
San Diego
Statewide trips
Northern California trips
Southern California trips

Pacheco vs. Altamont vs. Both

		Preferred Pacheco	Preferred Altamont	Pacheco vs Altamont		Preferred Pacheco + Altamont	Pacheco + Altamont vs Pacheco or Altamont
Year 2030 Ridership							
Systemwide Trips							
	CHSRA	95.8	92.6	Pacheco better by	3%	98.0	Pacheco + Altamont Best
	Regional Rail	98.4	94.5	Pacheco better by	4%	100.1	Pacheco + Altamont Best
- Southern California Trips (Fresno and South)							
	CHSRA	42.6	40.7	Pacheco better by	5%	43.4	Pacheco + Altamont Best
	Regional Rail	42.6	40.7	Pacheco better by	5%	43.4	Pacheco + Altamont Best
- Northern California Trips (Merced and North)							
	CHSRA	13.2	18.0	Altamont better by	36%	17.8	Altamont Best
	Regional Rail	15.8	19.9	Altamont better by	26%	19.9	Pacheco + Altamont or Alt Best
- Northern California to Southern California Trips							
	CHSRA	40.0	33.9	Pacheco better by	18%	36.8	Pacheco Best
	Regional Rail	40.0	33.9	Pacheco better by	18%	36.8	Pacheco Best
Year 2006 Northern California Segment Capital Cost ($-Billion)							
	CHSRA	$17.33	$17.53	Pacheco better by	1%	$ 22.48	Pacheco Best
	Regional Rail	$16.06	$16.68	Pacheco better by	4%	$ 21.20	Pacheco Best
Cost Effectiveness (Capital $ / All No CA Riders)							
	CHSRA	$23.61	$24.46	Pacheco better by	3%	$ 29.84	Pacheco Best
	Regional Rail	$20.87	$22.46	Pacheco better by	7%	$ 27.09	Pacheco Best

Q3: How can High-Speed Rail be phased in Northern California and the Bay Area?

Phase 1 – Regional Improvements

- Caltrain intends to use lightweight electrified trains – investment in the Peninsula trackage with regional and high-speed rail funding can make this corridor "high-speed rail ready"
- Improvements to ACE and Capitol Corridor services would also occur in the same timeframe to better link Sacramento and the Central Valley to the Bay Area. Consider seeking additional HSR bond funds dedicated to upgrading Altamont corridor for regional service.

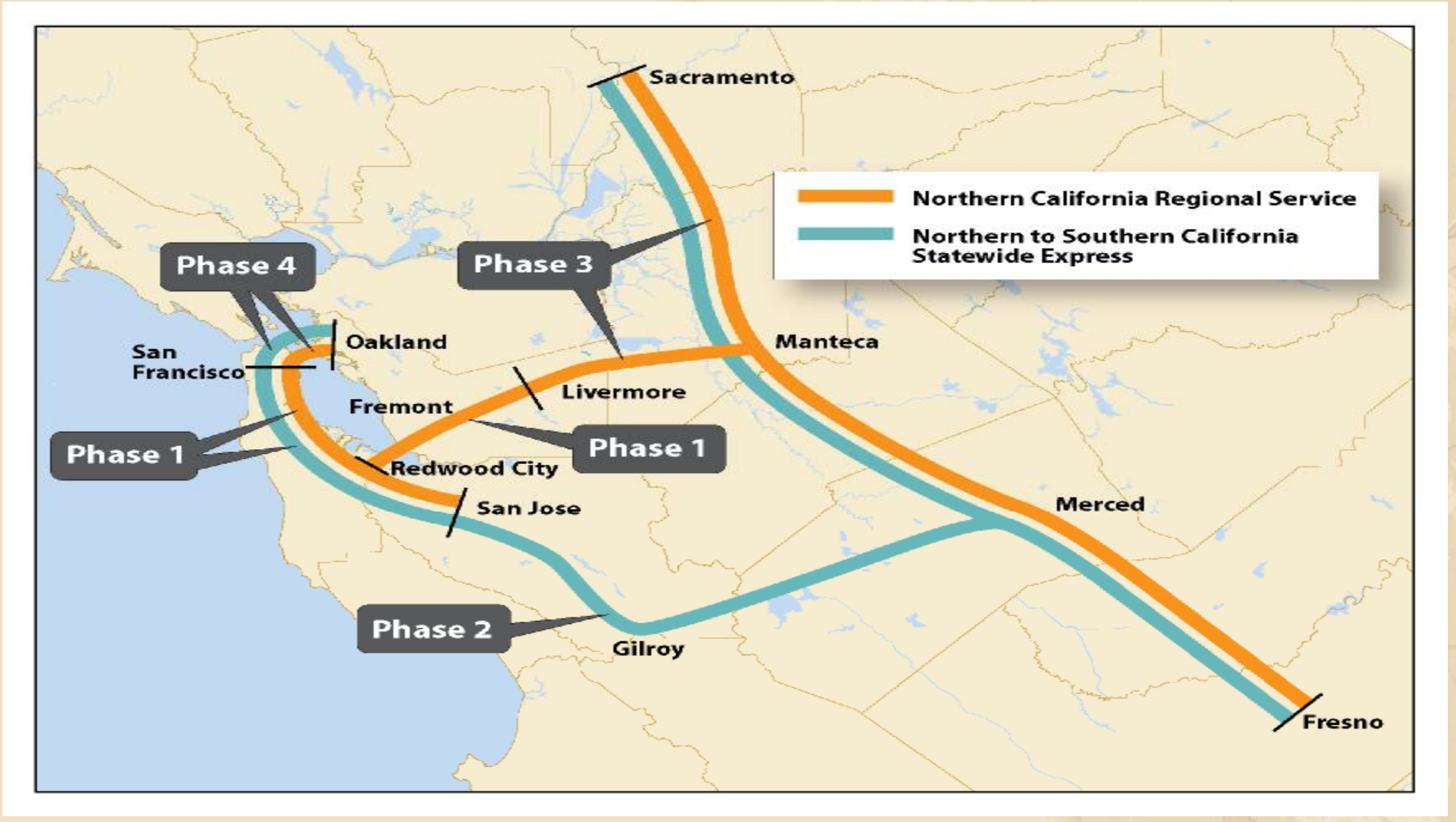
Phase 2 - Linking The Bay Area and The Rest of California

- Making the link between Los Angeles San Francisco/San Jose with express trains through the Pacheco Pass would be the next step.

Phase 3 & 4 - Ultimate Rail Vision

- The long term network will include both Altamont as well as Pacheco routes and a second Transbay Tube which will also add a new BART link connecting San Francisco to Oakland

Pacheco + Altamont Option



High-Speed Rail Bond Measure

- **Current legislation provides for a $9.95 billion HSR bond measure to be placed on the November 2008 statewide ballot**
- **Bond measure in two parts:**
  - $9 billion for building HSR between SF Transbay Transit Center and LA Union Station
  - $ 950 million for "supporting rail infrastructure"
    - $760 million allocated by formula to commuter/urban rail
    - $190 million allocated to intercity rail
- **Bay Area's share of the $760 million is $439 million allocated as follows:**
  - **ACE** - $18 million
  - **BART** - $285 million
  - **Caltrain** - $46 million
  - **Muni** - $69 million
  - **VTA** - $ 21 million